

COMMODORE INTERNATIONAL ANNOUNCES NEW GENERATION LOWCOST PERSONAL COMPUTER SYSTEM - THE VIC 20

For release: 9/30/80

(Norristown, PA) -- Commodore International Ltd. (AMEX: CBU) today introduced the first full-featured, expandable color computer system selling under \$300. The new computer, called VIC 20, offers a full range of special features and expansion capabilities which rival the features of existing microcomputers selling at 4 or 5 times the cost.

The new VIC (Video Interface Computer) connects to any television set or monitor and provides 5K bytes of memory.

The features speak for themselves:

- -- color
- -- sound
- -- programmable function keys
- -- memory expansion to 32K bytes
- -- standard PETBASIC
- -- full size typewriter keyboard
- -- external expansion ports
- -- 22 characters by 23 line screen display
- -- high resolution graphics
- -- graphics character set

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- -- joystick/paddles/lightpen
- -- external plug-in memory and program cartridges
  A"USER FRIENDLY" COMPUTER

"The new VIC computer is designed to be the most user friendly computer on the market...friendly in price, friendly in size, friendly to use and expand and enjoy," said Commodore Chairman Irving Gould. "In 1977, we pioneered the personal computer industry with the world's first self-contained personal computer...the PET. Then we expanded the PET into a business system...the CBM. Now, we're introducing a new generation of personal computers which anyone can afford to buy, to learn on and apply...from first-time users to hobbyists."

"With the VIC we -- Commodore -- are providing a computer system which helps almost anyone get involved in computing quickly and easily...with enough built-in expansion features to let the system "grow" with the user as his knowledge and requirements become more sophisticated."

### EXPANSION FEATURES & PERIPHERALS

The VIC 20 is designed so a first time user can begin using it immediately with plug-in program cartridges, and build his system gradually as his needs (or budget) allow.

VIC system peripherals will include a tape cassette unit, single floppy disk drive, printer -- and a broad range of add-on accessories which tailor the system to a variety of special



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applications.

Commodore's new "2031" single disk drive unit will be provided in a serial bus version for use with the VIC, and at least one new Commodore printer will also be introduced.

The VIC's memory -- its capacity for storing and processing information -- can be expanded using simple plug-in ROM cartridges.

Special application programs and games will also be available in plug-in ROM form, as well as on tape and disk media. Some of these programs will be designed by Commodore programmers, but the majority will come from outside software developers -- individuals as well as software houses. Commodore is already actively encouraging ROM-based program development, with excellent results.

Additional special features like the computer's RS232C interface capability makes it possible to use the VIC with a telephone modem for accessing telecomputing services such as THE SOURCE or communicating with other computers. Special interface cartridges will also enable the VIC owner to use a wide variety of peripherals now on the market.

## DOCUMENTATION & SELF-TEACHING MATERIALS

Commodore will provide excellent documentation for first-time users as well as software writers and computer entrepreneurs, in the form of books and manuals -- some of which will be written and



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marketed by outside publishers, with Commodore's support.

Innovative self-teaching materials will allow new and experienced computerists alike to explore their own special needs and interests...from basic computing to computer screen animation and use of the VIC in the classroom.

It is anticipated that the VIC will be used by many people to teach themselves about computing -- to help them prepare for the increased use of computers not only in business and science, but also in home and school environments.

#### SOFTWARE DEVELOPMENT

Early interest and response from software developers makes it apparent that many software writers and programmers have been waiting and hoping for a product like the VIC, which lets them write "user friendly" programs whose operating systems and protocols are invisible to the user, and whose potential for day-to-day practical application is enormous.

Commodore is currently working with a number of professional software houses to explore creative new program ideas. company will also encourage talented individuals/entrepreneurs to write more "user friendly" software and will take creative approaches in this area as well.



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# THE DEVELOPMENT OF THE VIC COMPUTER

The VIC computer system was made possible by Commodore's unique position as the only truly multinational, verticallyintegrated personal computer company. The ability to martial expertise in several different technologies, combined with multinational engineering and marketing expertise, proved to be determining factors in the development of the product.

The new computer uses the industry standard 6502 "computer on a chip" originally developed by Commodore's own MOS Technology subsidiary and also uses a new MOS Technology semiconductor device called the VIC (Video Interface Chip) which incorporates Random Access Memory (RAM), Read-Only Memory (ROM) and video control circuitry all on the same chip. These two semiconductor devices, coupled with the efforts of three separate groups of design engineers working on two continents, helped make VIC a reality.

## PRODUCT INTRODUCTION & AVAILABILITY

The VIC computer, which is being sold as the "VIC 1001" in Japan, was introduced in Tokyo through Commodore's Japanese subsidiary during mid-September and will go on sale there in October. The Japanese version of the VIC can simultaneously access both Japanese (Katakana) and English character sets, as well as character graphics. The entire system will be test marketed in the Japanese computer market before being introduced in other countries. Commodore has been selling and marketing



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consumer electronics products in that country since 1968.

The VIC 20, as it will be known in the United States, will be introduced for sale during the first quarter of calendar 1981. The VIC will be sold through Commodore's existing network of computer dealers in the United States, and potentially through other consumer outlets.



Introduction in other countries will follow soon after the January U.S. introduction.

Commodore International Ltd. is a vertically integrated high technology company with representatives in nearly 50 countries. The company designs and manufactures computer systems, semiconductor devices, liquid crystal displays, consumer electronics and office equipment.